



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/080,845 | 02/22/2002 | David M. Braun | 10020155-1 | 9676 |

7590 12/05/2005
AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

| EXAMINER |
|----------|
|----------|

PHILPOTT, JUSTIN M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2665

DATE MAILED: 12/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/080,845

Applicant(s)

BRAUN ET AL.

Examiner

Justin M. Philpott

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 13 is/are rejected.
- 7) ☒ Claim(s) 2-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20020222.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by the prior art in U.S. Patent No. 6,784,428 to Rabolt et al.

Regarding claim 1, the prior art of Rabolt teaches a method for determining power of a modulated signal (e.g., see col. 3, line 45 – col. 4, line 19), comprising: applying the modulated signal (e.g., see col. 3, lines 53-59 regarding modulating) to a wavelength meter (e.g., see col. 3, line 45 regarding Michelson interferometer) to provide a frequency transformed interferogram (e.g., see col. 3, line 46 regarding interferogram) representing the modulated signal by a plurality of consecutive frequency bins (e.g., see col. 3, line 58 regarding individual frequencies), each frequency bin (e.g., individual frequency) in the plurality of frequency bins having a corresponding bin value (e.g., frequency or a corresponding wavelength); designating a bin range (e.g., frequency range or wavelength range according to path length difference) within the frequency transformed interferogram (e.g., see col. 3, lines 53-65 regarding path length difference); and summing a series of bin values within the frequency transformed interferogram over the designated bin range (e.g., see col. 3, lines 61-65 regarding recombined to result in an

interference pattern) to provide a sum (e.g., see col. 4, line 1 regarding summation of all wavelengths) that represents the power of the modulated signal to a predetermined accuracy (e.g., see col. 3, lines 36-44 regarding spectral information, and see col. 5, line 42 wherein spectral information is indicated as a power spectrum).

Regarding claim 13, the prior art of Rabolt teaches designating a bin range within the frequency transformed interferogram is performed automatically based on attributes of the frequency transformed interferogram (e.g., see col. 3, lines 36-65 regarding obtaining a path length difference to produce the interferogram).

Allowable Subject Matter

3. Claims 2-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter: claim 2 recites the designating of the bin range in accordance with claim 1 which further comprises mapping a series of signal characteristics to a corresponding series of bin spans and enabling a selection of one signal characteristic from the series of signal characteristics, wherein in response to selection of the one signal characteristic from the series of signal characteristics establishing the designated bin range as having a bin span that corresponds to the selected one signal characteristic defined by the mapping of the series of signal characteristics to the corresponding series of bin spans, and being centered about a center bin within the frequency transformed interferogram; wherein such steps were not found in a search of related prior art;

Art Unit: 2665

and claims 3-12 depend upon claim 2 and therefore comprise allowable subject matter for the same reason discussed above regarding claim 2.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Nos. 5,422,721 to Ryan and 5,757,488 to Melton et al. each disclose methods using a Michelson or other interferometer to provide a frequency transformed interferogram; U.S. Patent No. 6,943,871 to Abedin discloses an optical dispersion measurement apparatus and method; and European Patent Application No. 91301215.9 by Hilby et al. discloses an interferometer method comprising summing signals.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M. Philpott whose telephone number is 571.272.3162. The examiner can normally be reached on M-F, 9:00am-5:00pm.

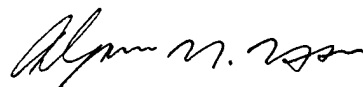
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on 571.272.3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2665

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Justin M Philpott



ALPUS H. HSU
PRIMARY EXAMINER